

CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- Before this Amendment: Claims 1-40.
- After this Amendment: Claims 1, 3-14, 16, and 18-39.

Claims canceled herein: Claims 2, 15, 17, and 40.

Claim previously amended: Claims 1, 7, 9, 11-14, 16, 28, 30, 31, and 36.

Claim amended herein: Claims 1, 16, 32, 33, and 36.

New claims: None.

Claims:

1. (Currently Amended) A method comprising:

- servicing a Web request from a Web application;
- associating a Globally Unique Identifier (GUID) with the Web request, wherein events which happen during servicing of the Web request can be identified by the GUID which is logged with each of the events;
- detecting the occurrence of an event in the servicing of the Web request; and
- logging an entry in a trace log, wherein the entry includes:
 - information descriptive of the occurrence of the event in the servicing of the Web request; and
 - the GUID corresponding to the Web request; and
 - determining which of the information that is descriptive of the occurrence of the event to put into the entry as a function of a predetermined level of verbosity.

2. (Canceled)

3. (Original) The method as defined in Claim 1, wherein the entry is logged in the trace log during the servicing of the Web request only when the event is selected from the group consisting of:

the event occurs within the context of a predetermined Universal Resource Locator (URL);

the event pertains of the functionality of authentication;

the event pertains of the functionality of security;

the event pertains of the functionality of compression;

the event pertains of the functionality of a Common Gateway Interface (CGI);

the event pertains of the functionality of one or more filters; and

the event is a predetermined event.

4. (Original) The method as defined in Claim 1, wherein:

the entry is logged in the trace log during the servicing of the Web request only when the event pertains to a predetermined filter; and

the information includes data going into the predetermined filter and data coming out of the predetermined filter.

5. (Previously Presented) The method as defined in Claim 1, wherein:

the servicing of the Web request from the Web application comprises executing the Web application that is running on or interfacing with a server that is servicing the Web request;

the detecting of the occurrence of the event in the servicing of the Web request comprises detecting the occurrence of the event in the execution of the Web application that is running on or interfacing with the server; and

the information descriptive of the occurrence of the event in the servicing of the Web request comprises the occurrence of the event in the execution of the Web application.

6. (Original) The method as defined in Claim 1, wherein at least one of the detecting and the logging are performed by one or more components of the operating system of a server.

7. (Previously Presented) The method as defined in Claim 6, wherein:

the server services the Web request from the Web application;

the operating system of the server includes one or more Application Program Interfaces (APIs);

the Web application is executed by, or interfaces with, the server;

the Web application interfaces with at least one said API to log a Web application event as a Web application entry in the trace log;

the Web application event occurs within the Web application itself;

and

the Web application entry includes:

information descriptive of the occurrence of the Web application event in the servicing of the Web request by the server when the Web application is running on, or interfacing with, the server; and

the GUID corresponding to the Web request.

8. (Original) The method as defined in Claim 1, wherein:

a server having an operating system services the Web request from the Web application; and

at least one of the detecting and the logging are performed by one or more server applications that are executed by the server.

9. (Previously Presented) The method as defined in Claim 8, wherein:

- the server services the Web request from the Web application;
- the operating system of the server includes one or more APIs;
- the Web application is executed by, or interfaces with, the server;
- the Web application interfaces with at least one said API to log a Web application event as a Web application entry in the trace log;
- the Web application event occurs within the Web application itself;
- and

the Web application entry includes:

- information descriptive of the occurrence of the Web application event in the servicing of the Web request by the server when the Web application is running on, or interfacing with, the server; and

- the GUID corresponding to the Web request.

10. (Original) The method as defined in Claim 1, wherein the logging of the entry in the trace log is in response to the detecting of the occurrence of the event in the servicing of the Web request.

11. (Previously Presented) The method as defined in Claim 1, further comprising generating a report containing at least a portion of the information in each said entry for which the GUID in the entry matches a supplied ID.

12. (Previously Presented) The method as defined in Claim 11, wherein:

each said entry is in a binary format; and

the generating of the report further comprises using a GUID corresponding to each said event to map the binary format of each said entry into an event description that is in a format that is human readable.

13. (Previously Presented) The method as defined in Claim 1, wherein the GUID is the first portion of the entry.

14. (Previously Presented) The method as defined in Claim 1, wherein the GUID is unique to the Web request with respect to other said Web requests, and wherein the GUID is 128 bit.

15. (Canceled)

16. (Currently Amended) A computer-readable medium having stored thereon computer-executable instructions for performing steps comprising:

associating a Globally Unique Identifier (GUID) with a Web request, wherein events which happen during servicing of the Web request can be identified by the GUID which is logged with the events;

servicing a the Web request with a server from a Web application that is executing on the server, wherein during the servicing multiple logger streams are simultaneously active to log the events as the Web request is being serviced by the server;

detecting the occurrence of the events during the servicing of the Web request by the server; ~~and~~

logging each of the events as entries in a trace log, wherein each entry includes:

information descriptive of the occurrence of an event; ~~and~~

an event ID corresponding to the event; and

the GUID corresponding to the Web request; and

determining which of the descriptive information to put into the entry as a function of a predetermined level of verbosity.

17. (Canceled)

18. (Original) The computer-readable medium as defined in Claim 16, wherein the entry is logged in the trace log during the servicing of the Web request by the server only when the event is selected from the group consisting of:

- the event occurs within the context of a predetermined URL;
- the event pertains of the functionality of authentication;
- the event pertains of the functionality of security;
- the event pertains of the functionality of compression;
- the event pertains of the functionality of a CGI;
- the event pertains of the functionality of one or more filters; and
- the event is a predetermined event.

19. (Original) The computer-readable medium as defined in Claim 16, wherein the entry is logged in the trace log during the servicing of the Web request by the server only when the event pertains to a predetermined filter, wherein the information includes data going into the predetermined filter and data coming out of the predetermined filter.

20. (Original) The computer-readable medium as defined in Claim 16, wherein the steps further comprise at least one of:

- activating the logging when the logging is deactivated; and
- deactivating the logging when the logging is activated.

21. (Original) The computer-readable medium as defined in Claim 20, wherein the activating and the deactivating are performed remotely from the server.

22. (Original) The computer-readable medium as defined in Claim 20, wherein the trace log is in remote location from the server.

23. (Original) The computer-readable medium as defined in Claim 16, wherein at least one of the detecting and the logging are performed by one or more components of an operating system of the server.

24. (Original) The computer-readable medium as defined in Claim 23, wherein:

the operating system of the server includes one or more APIs; and
the Web application interfaces with at least one said API for the logging of each said Web application event as an entry in the trace log.

25. (Original) The computer-readable medium as defined in Claim 16, wherein at least one of the detecting and the logging are performed by one or more server applications that are executed by the server.

26. (Original) The computer-readable medium as defined in Claim 25, wherein:

the operating system of the server includes one or more APIs; and
the Web application interfaces with at least one said API for the logging of each said Web application event as an entry in the trace log.

27. (Original) The computer-readable medium as defined in Claim 16, wherein the step of logging of the entry in the trace log is in response to the detecting of the occurrence of the event in the servicing of the Web request.

28. (Previously Presented) The computer-readable medium as defined in Claim 16, where the steps further comprise generating a report containing at least a portion of the information in each said entry for which the Web request GUID in the entry matches a supplied ID.

29. (Original) The computer-readable medium as defined in Claim 28, wherein:

each said entry is in a binary format; and
the generating of the report further comprises using the event ID to map the binary format of each said entry into an event description that is in a format that is human readable.

30. (Previously Presented) The computer-readable medium as defined in Claim 16, wherein the Web request GUID is the first portion of the entry.

31. (Previously Presented) The computer-readable medium as defined in Claim 16, wherein the Web request GUID is unique to the Web request with respect to other said Web requests, and wherein the Web request is for at least one of: a static file; a Common Gateway Interface (CGI); an active server page (ASP).

32. (Currently Amended) A facility for tracing a Web request on a network, the facility comprising:

identifying means for identifying when a predetermined event occurs in a predetermined Web request when the predetermined Web request is being serviced; and

a logging means, in communication with the identifying means, for logging the event in a trace log as the event happens, wherein the log of the event includes: a GUID corresponding to the predetermined Web request; and information descriptive of the occurrence of the ~~predetermined~~ event when the predetermined Web request is being serviced;

wherein the logging means is further for determining which of the information that is descriptive of the occurrence of the event to put into the entry in the trace log as a function of a predetermined level of verbosity.

33. (Currently Amended) A network environment comprising a server servicing Web requests from a Web application while performing Web request-based tracing to produce traces that include a GUID for each Web request and to flow each GUID from the server across to the Web application, wherein the traces include information that is descriptive of events which occur during the servicing of the Web request, and wherein the information to be included in the traces is determined in part as a function of a predetermined level of verbosity.

34. (Original) The network environment as defined in Claim 33, further comprising multiple simultaneously active logger streams that are concurrently running on the server and that are each trace-enabled.

35. (Original) The network environment as defined in Claim 34, wherein the server returns each said trace from the multiple logger streams to a corresponding said trace-enabled Web application for which the Web request there from was serviced by the server.

36. (Currently Amended) A server module comprising:
logic configured to service a Web request from a Web application;
logic configured to detect an occurrence of an event in the servicing
of the Web request; and
logic configured to log an entry in a trace log, wherein the entry
includes:
information descriptive of the occurrence of the event the
servicing of the Web request; and
a Globally Unique Identifier (GUID) corresponding to the Web
request, wherein the GUID is associated with the Web request, so
that events which happen during servicing of the Web request can
be identified by the GUID which is logged with each of the events;
and
logic configured to determine which of the information descriptive of
the occurrence of the event to put into the entry as a function of a
predetermined level of verbosity.

37. (Original) The server module as defined in Claim 36, further
comprising logic configured to determine which of the information that is
descriptive of the occurrence of the event in the servicing of the Web
request to put into the entry as a function of a predetermined level of
verbosity.

38. (Original) The server module as defined in Claim 36, further comprising logic configured to limit the entries in the trace log that correspond to a predetermined said event that is selected from the group consisting of:

- the event occurs within the context of a predetermined URL;
- the event pertains of the functionality of authentication;
- the event pertains of the functionality of security;
- the event pertains of the functionality of compression;
- the event pertains of the functionality of a CGI;
- the event pertains of the functionality of one or more filters; and
- the event is a predetermined event.

39. (Original) The server module as defined in Claim 36, wherein:

- the entry is logged in the trace log during the servicing of the Web request only when the event pertains to a predetermined filter; and
- the information includes data going into the predetermined filter and data coming out of the predetermined filter.

40. (Canceled)